

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/573,989  
Source: IFWP  
Date Processed by STIC: 04/07/2006

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 04/07/2006

PATENT APPLICATION: US/10/573,989

TIME: 11:12:13

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\04072006\J573989.raw

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3 <110> APPLICANT: Evotec NeuroSciences GmbH
4     Von Der Kammer, Heinz
5     Pohlner, Johannes
7 <120> TITLE OF INVENTION: DIAGNOSTIC AND THERAPEUTIC USE OF A SULFOTRANSFERASE
8     FOR NEURODEGENERATIVE DISEASES
10 <130> FILE REFERENCE: 2335.0140000/SRL/KPQ
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/573,989
C--> 12 <141> CURRENT FILING DATE: 2006-03-30
12 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/052353
12 <151> PRIOR FILING DATE: 2004-09-29
15 <150> PRIOR APPLICATION NUMBER: 60/506,775
16 <151> PRIOR FILING DATE: 2003-09-30
18 <160> NUMBER OF SEQ ID NOS: 22
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 21
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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30     2 gene
32 <400> SEQUENCE: 1
33 caaagtgggtg gtcaggaggg t                               21
36 <210> SEQ ID NO: 2
37 <211> LENGTH: 22
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39 <213> ORGANISM: Artificial Sequence
41 <220> FEATURE:
42 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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44     2 gene
46 <400> SEQUENCE: 2
47 ccgtttcaaa tacagcacca ag                               22
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 18
52 <212> TYPE: DNA
53 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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59 <400> SEQUENCE: 3
60 ctgaccccgga tgagatcg                               18

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63 <210> SEQ ID NO: 4
64 <211> LENGTH: 19
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
70     human SULT4A1 splice variant 1 gene
72 <400> SEQUENCE: 4
73 ggcaggtggc tcttgatga                                19
76 <210> SEQ ID NO: 5
77 <211> LENGTH: 19
78 <212> TYPE: DNA
79 <213> ORGANISM: Artificial Sequence
81 <220> FEATURE:
82 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
83     human SULT4A1 splice variant 2 gene
85 <400> SEQUENCE: 5
86 tcacctaccc caagtccgt                                19
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 23
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
96     human SULT4A1 splice variant 2 gene
98 <400> SEQUENCE: 6
99 ttcatacttg agaaaaagca cgt                            23
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 20
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
109     human cyclophilin B gene
111 <400> SEQUENCE: 7
112 actgaagcac tacgggcctg                                20
115 <210> SEQ ID NO: 8
116 <211> LENGTH: 19
117 <212> TYPE: DNA
118 <213> ORGANISM: Artificial Sequence
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121 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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124 <400> SEQUENCE: 8
125 agccgttggt gtctttgcc                                19
128 <210> SEQ ID NO: 9
129 <211> LENGTH: 20
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial Sequence

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133 <220> FEATURE:
134 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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137 <400> SEQUENCE: 9
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141 <210> SEQ ID NO: 10
142 <211> LENGTH: 22
143 <212> TYPE: DNA
144 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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151 tctcatcaag cgtcagcagt tc                                22
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155 <211> LENGTH: 19
156 <212> TYPE: DNA
157 <213> ORGANISM: Artificial Sequence
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160 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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164 tggaacggtg aaggtagaca                                19
167 <210> SEQ ID NO: 12
168 <211> LENGTH: 19
169 <212> TYPE: DNA
170 <213> ORGANISM: Artificial Sequence
172 <220> FEATURE:
173 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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176 <400> SEQUENCE: 12
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181 <211> LENGTH: 20
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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189 <400> SEQUENCE: 13
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194 <211> LENGTH: 21
195 <212> TYPE: DNA
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198 <220> FEATURE:
199 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
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202 <400> SEQUENCE: 14

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207 <211> LENGTH: 21
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211 <220> FEATURE:
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213 human transferrin receptor TRR gene
215 <400> SEQUENCE: 15
216 gtcgctggtc agttcgtgat t 21
219 <210> SEQ ID NO: 16
220 <211> LENGTH: 23
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Description of Artificial Sequence:primer for the
226 human transferrin receptor TRR gene
228 <400> SEQUENCE: 16
229 agcagttggc tttgtacct ctc 23
232 <210> SEQ ID NO: 17
233 <211> LENGTH: 284
234 <212> TYPE: PRT
235 <213> ORGANISM: Homo sapiens
237 <400> SEQUENCE: 17
238 Met Ala Glu Ser Glu Ala Glu Thr Pro Ser Thr Pro Gly Glu Phe Glu
239 1 5 10 15
241 Ser Lys Tyr Phe Glu Phe His Gly Val Arg Leu Pro Pro Phe Cys Arg
242 20 25 30
244 Gly Lys Met Glu Glu Ile Ala Asn Phe Pro Val Arg Pro Ser Asp Val
245 35 40 45
247 Trp Ile Val Thr Tyr Pro Lys Ser Gly Thr Ser Leu Leu Gln Glu Val
248 50 55 60
250 Val Tyr Leu Val Ser Gln Gly Ala Asp Pro Asp Glu Ile Gly Leu Met
251 65 70 75 80
253 Asn Ile Asp Glu Gln Leu Pro Val Leu Glu Tyr Pro Gln Pro Gly Leu
254 85 90 95
256 Asp Ile Ile Lys Glu Leu Thr Ser Pro Arg Leu Ile Lys Ser His Leu
257 100 105 110
259 Pro Tyr Arg Phe Leu Pro Ser Asp Leu His Asn Gly Asp Ser Lys Val
260 115 120 125
262 Ile Tyr Met Ala Arg Asn Pro Lys Asp Leu Val Val Ser Tyr Tyr Gln
263 130 135 140
265 Phe His Arg Ser Leu Arg Thr Met Ser Tyr Arg Gly Thr Phe Gln Glu
266 145 150 155 160
268 Phe Cys Arg Arg Phe Met Asn Asp Lys Leu Gly Tyr Gly Ser Trp Phe
269 165 170 175
271 Glu His Val Gln Glu Phe Trp Glu His Arg Met Asp Ser Asn Val Leu
272 180 185 190
274 Phe Leu Lys Tyr Glu Asp Met His Arg Asp Leu Val Thr Met Val Glu

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275          195          200          205
277 Gln Leu Ala Arg Phe Leu Gly Val Ser Cys Asp Lys Ala Gln Leu Glu
278          210          215          220
280 Ala Leu Thr Glu His Cys His Gln Leu Val Asp Gln Cys Cys Asn Ala
281 225          230          235          240
283 Glu Ala Leu Pro Val Gly Arg Gly Arg Val Gly Leu Trp Lys Asp Ile
284          245          250          255
286 Phe Thr Val Ser Met Asn Glu Lys Phe Asp Leu Val Tyr Lys Gln Lys
287          260          265          270
289 Met Gly Lys Cys Asp Leu Thr Phe Asp Phe Tyr Leu
290          275          280
293 <210> SEQ ID NO: 18
294 <211> LENGTH: 171
295 <212> TYPE: PRT
296 <213> ORGANISM: Homo sapiens
298 <400> SEQUENCE: 18
299 Met Ala Glu Ser Glu Ala Glu Thr Pro Ser Thr Pro Gly Glu Phe Glu
300 1          5          10          15
302 Ser Lys Tyr Phe Glu Phe His Gly Val Arg Leu Pro Pro Phe Cys Arg
303          20          25          30
305 Gly Lys Met Glu Glu Ile Ala Asn Phe Pro Val Arg Pro Ser Asp Val
306          35          40          45
308 Trp Ile Val Thr Tyr Pro Lys Ser Val Gly Tyr Gly Ser Trp Phe Glu
309          50          55          60
311 His Val Gln Glu Phe Trp Glu His Arg Met Asp Ser Asn Val Leu Phe
312 65          70          75          80
314 Leu Lys Tyr Glu Asp Met His Arg Asp Leu Val Thr Met Val Glu Gln
315          85          90          95
317 Leu Ala Arg Phe Leu Gly Val Ser Cys Asp Lys Ala Gln Leu Glu Ala
318          100          105          110
320 Leu Thr Glu His Cys His Gln Leu Val Asp Gln Cys Cys Asn Ala Glu
321          115          120          125
323 Ala Leu Pro Val Gly Arg Gly Arg Val Gly Leu Trp Lys Asp Ile Phe
324          130          135          140
326 Thr Val Ser Met Asn Glu Lys Phe Asp Leu Val Tyr Lys Gln Lys Met
327 145          150          155          160
329 Gly Lys Cys Asp Leu Thr Phe Asp Phe Tyr Leu
330          165          170
333 <210> SEQ ID NO: 19
334 <211> LENGTH: 2419
335 <212> TYPE: DNA
336 <213> ORGANISM: Artificial Sequence
338 <220> FEATURE:
339 <223> OTHER INFORMATION: Description of Artificial Sequence:nucleotide
340 sequence of human SULT4A1 cDNA, splice variant 1
342 <400> SEQUENCE: 19
343 gcgacggcga cggcggcggc atggcggaga gcgaggccga gacccccagc accccggggg 60
344 agttcgagag caagtacttc gagttccatg gcgtgcggct gccgcccttc tgccgcggga 120
345 agatggagga gatcgccaac ttcccgggtgc ggcccagcga cgtgtggatc gtcacctacc 180

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VERIFICATION SUMMARY

DATE: 04/07/2006

PATENT APPLICATION: US/10/573,989

TIME: 11:12:14

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\04072006\J573989.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date